

JET BLACK HEART

- Gravity **10 BLG**
- ABV **4 %**
- IBU **31**
- SRM **27**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **53.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **64.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.3 liter(s)**
- Total mash volume **41.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 6 kg (57.5%) | 80 % | 5 |
| Grain | Fawcett - Dark Crystal | 0.5 kg (4.8%) | 71 % | 300 |
| Grain | Wheat, Torrified | 0.68 kg (6.5%) | 79 % | 4 |
| Grain | Fawcett - Brown | 0.68 kg (6.5%) | 72 % | 180 |
| Grain | Black (Patent) Malt | 0.4 kg (3.8%) | 55 % | 985 |
| Grain | Weyermann - Carafa I | 0.5 kg (4.8%) | 70 % | 690 |
| Grain | Platki owsiane | 1 kg (9.6%) | 85 % | 3 |
| Grain | Simpsons - Crystal Extra Dark | 0.68 kg (6.5%) | 74 % | 315 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil | Magnum | 30 g | 60 min | 13.5 % |
| Boil | Sorachi Ace | 15 g | 60 min | 10 % |
| Boil | Sorachi Ace | 15 g | 20 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale | Dry | 22 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Fining | Mech irlandzki | 10 g | Boil | 15 min |
| Water Agent | Gips piwowarski | 4 g | Mash | 75 min |
| Water Agent | Chlorek wapnia | 6 g | Mash | 75 min |

| | | | | |
|-------------|--------------------|-----|------|--------|
| Water Agent | Kwaśny węglan sodu | 4 g | Mash | 75 min |
|-------------|--------------------|-----|------|--------|